DOCUMENT RESUME

ED 413 778 FL 024 889

AUTHOR Kang, Dong-Ho
TITLE Assessing Korean Middle School Students' Language Learning Strategies in Input-Poor Environments.
PUB DATE 1997-00-00
NOTE 40p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Educational Environment; *English (Second Language); Foreign Countries; Interviews; Junior High Schools; *Learning Strategies; *Middle Schools; Protocol Analysis; Second Language Learning
IDENTIFIERS *Middle School Students; *South Korea

ABSTRACT

This study investigated the strategies used by middle school students in Korea for learning English as a Second Language (ESL) in an environment that provides little English language input. Subjects were 60 students in 3 rural public middle schools. Students were selected randomly from advanced and low-level ESL groups in grades 7, 8, and 9. Using a retrospective interview and think-aloud protocol, strategies for vocabulary learning, listening comprehension, reading comprehension, and writing were elicited. Results indicate that over grade levels, student use of both cognitive and metacognitive strategies increased somewhat. In ninth grade in particular, good students used more effective strategies than did poor students. No difference between male and female students was found. Specific strategy use depended on task type, with students consistently using memory strategies during vocabulary learning, compensation strategies during listening or reading comprehension tasks, and metacognitive strategies in listening and writing tasks. Most students used noncommunicative strategies such as repeating, translation, or rote memorization. In higher grades, advanced students relied less on the mechanical process. Poor students used traditional cognitive strategies across grade levels. Overall, every student was actively involved in the learning process. Appended materials include notes on learning strategies and study data. Contains 68 references. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 413 778

Assessing Korean Middle school students' Language Learning Strategies in input-poor environments

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Dong-Ho Kang

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Reporter: Dong-Ho Kang (Graduate Student of Language Education at Indiana Univeristy)

Address: Dong-Ho Kang
1402 Redbud Hill Apts Indiana University
Bloomington, Indiana, 47408, U.S.A.
E-mail address: DKANG@INDIAN.EDU
PH: 812-857-2667 (Home)

BEST COPY AVAILABLE

FL024889

1. Introduction

The lack of motivation and real opportunity for practicing a target language constitutes a major problem in input-poor foreign language environments (Kouraogo, 1993). Middle and high schools in the rural areas in Korea represent language learning contexts where learners have few opportunities to hear or read English outside or even inside classrooms (Kouraogo, 1987). Much research has been focused on native or ESL students, but in only a few studies have EFL learners in input-poor environments been observed (Huang & Van Naerssen, 1985; Kouraogo, 1987). Learning strategies deserve more attention in these contexts where unconscious acquisition caused by exposure to an abundant second language input outside the classroom is likely to be less critical than conscious strategies in influencing gains in linguistic and communicative competence (Krashen, 1981, 1982).

L2 research has supported the effectiveness of using learning strategies (Chamot & Kupper, 1989; Cohen, 1990; O'Malley & Chamot, 1990; Oxford & Crookall, 1989). The use of appropriate language learning strategies may lead to Korean middle school students' improved proficiency in overall or specific skill areas.

A language learning instructional framework might include the following steps: identifying students' current strategies, assessing their strategy needs, planning strategy instruction, direct teaching of strategies for different language skills, providing extensive opportunities to practice using the strategies, evaluating strategy use, and helping students transfer strategies to new tasks (Chamot & Kupper, 1989).

The purpose of this study was to identify Korean middle school students' current strategies in input-poor environments as a first step of the instructional framework. This study was designed to fill the lack of learning strategy research in the Korean EFL situation and to provide a foundation for an effective instructional framework.

2. Literature Review

There has been a growing interest in considering the task from the learner's point of view

and in chaning the focus of classroom from teacher-centered one to a learner-centered one (Rubin, 1987). Language learning strategies focus on the learner as the center of the learning process. Language learning strategies are defined as "behaviors or actions which learners use to make language learning more successful, self-directed, and enjoyable" (Oxford, 1989, p. 235). The usefulness of language learning strategies has been recognized by several researchers. First of all, learning strategies enable students to become more autonomous, self-directed, and take charge of their own learning (Wenden, 1987, Rubin, 1987). It is assumed that consious attention to the learning process is the first step to making language automatic, so called "conscious raising" (Smith, 1981). Language learning strategies help learners participate actively in the communicatively-oriented classroom (Oxford, Lavine, & Crookall, 1989). The role of teacher helps students become more autonomous by identifying, developing, and guiding their learning strategies (Chamot & Kupper, 1989). Even though language learning strategies are useful in both formal learning and less formal acquisition situations (Krashen, 1982; Oxford, 1990; Oxford et al., 1989), I will apply this term to only the formal classroom situation rather than informal situation in the current study.

L2 research has linked the use of appropriate learning strategies to successful language performance (Naiman et al., 1975; Rubin, 1975; Wenden, 1985). The basic assumption of these strategy identification research is that once language learning strategies of good language learners are identified, they can be made available and used by less successful learners to enable them to learn a foreign/second langauge more effectively (Hosenfeld, 1979). Effective L2 learners are aware of the strategies and why they use them (Abraham & Vann, 1987; O'Malley & Chamot, 1990). Strategy identification studies have shown that effective second and foreign language learners use a variety of appropriate metacognitive, cognitive, and social-affective strategies for both retrospective and productive tasks (Naiman et al., 1975; Rubin, 1975; Oxford, 1993). Rubin (1975) described good learners' learning strategies as follows: accurate guessers; strong, persevering drive to communicate; focus on form by looking for patterns, classifying, and

analyzing; take advantage of all practice opportunities; monitor their own speech and the speech of others; and pay attention to meaning. More sophisticated strategies are employed by older or more advanced students (Bialystok, 1981; Chamot et al., 1987; Politzer, 1983).

Less effective learners are, on the other hand, likewise able to identify their own strategies, but they don't know how to choose the appropriate strategies or how to link them together into a useful "strategy chain", that is, lack of metacognitive strategies (Vann & Abraham, 1990, Wenden, 1987b). Vann & Abraham (1990) argued against traditional distinction between good language learners and poor language learners. Their study showed that even unsuccessful learners used good guessing strategy, applied grammatical rules, and were actively involved in language learning which Rubin (1975) and Naiman et al. (1975) described as criteria of good language learners' strategies (Wenden, 1985). Vann & Abraham's (1990) study indicated that unsuccessful learners lacked certain metacognitive strategies or self-regulatory skills (p. 191). This result supported that good learners were able to combine effective strategies (Chamot & Kupper, 1989). Most unsuccessful language learners are generally unaware of the wide variety of learning strategies available to them and use a limited number (Chamot & Kupper, 1989; Wenden & Rubin, 1987). Strategies of less effective learners often involve noncommunicative or rather mundane behaviors such as translation with heavy use of dictionaries, rote memorization, uncreative forms of repetition (Oxford, 1993).

A number of differences between the learning strategies used by learners in a classroom (as a foreign language) as opposed to those used in a more natural setting (as a second language) have been found. Oxford & Nyikos' (1989) study with university students studying a foreign language shows that they frequently reported employing strategies (formal rule-related practice strategies and general study strategies), while strategies which involved an extracurricular effort to communicate in the new language (functional practice strategies, and resourceful and independent strategies) were seldom used. L2 research in learning strategy use indicated that most L2 learners use fewer metacognitive than cognitive strategies (Chamot & Kupper, 1989). However, cognitive strategy

use decreased and metacognitive strategy use rose as the foreign language course level increased (Chamot et al., 1987). Oxford & Crookall (1989) also found that cognitive strategies and metacognitive strategies are often used together, supporting each other. Chamot and her associates' research indicated that foreign language students of Russian and Spanish across levels consistently used traditional cognitive strategies such as repetition or translation and their metacognitive strategies were restricted to planning rather than evaluating (Chamot et al., 1988; see O'Malley & Chamot, 1990).

Oxford (1993) synthesized published and unpublished research evidence on the factors influencing the choice of L2 learning strategies. The main categories are summarized as follows: motivation, gender, cultural background, type of task, age and L2 stage and learning style. In general, females reported on more strategies than males. Politzer (1983) reported that females showed a greater propensity than males to engage in out-of class social interactions. Oxford & Nyikos (1989) found that females taking the SILL reported using strategies far more often than did males in three of the five factors: formal rule-related practice, general study strategies, and conversational input elicitation strategies. Ehrman (1990), in a study of teachers and students in the Foreign Service Institute, found that females reported greater overall use of strategies than males. Ehrman & Oxford (1989) discovered significant gender differences in the SILL in the following strategies: general study strategies, strategies for searching for and communicating meaning, and metacognitive or self-management strategies. Green & Oxford (1995) showed that strategies used more often by women dominated two of the nine factors, Factor 3 (Social and affective strategies) and Factor 5 (sensory memory strategies).

The types of tasks also seemed to influence strategy use. Chamot & O'Malley's case study (1988) indicated that different types of language tasks elicited different strategy application. For example, self-monitoring and elaboration were important for all language tasks, while inferencing was used for listening and reading comprehension (see O'Malley & Chamot, 1990). Oxford et al. (1989) also reported that skillful learners often employed an important compensation strategy such

as good guessing rather than resort to a dictionary when encountering new words during listening and reading tasks. Competence in the skill of writing required the use of metacognitive strategies such as planning and self-evaluating (Oxford et al., 1989). Other studies showed the strong relationships between learning strategy use and learning style (Oxford, 1989; Ehrman & Oxford, 1989; Ely, 1989). According to these studies, visual students used visually-based strategies like taking notes and writing word groups while auditory students like working with tapes and practicing aloud.

Strategy use might be related to ethnic origins or instructional background. Some Asian students used strategies that were different from those of students from other cultural backgrounds (Politzer, 1987; Politzer & McGroarty, 1985; Reid, 1987). Politzer & McGroarty (1985) indicated that Asian students reporting fewer good language learning strategies still outperformed Hispanics in using monitoring strategies. Reid (1987) identified that Korean students were the most visual in their learning style preference among 9 national groups. Related to the studies above, Korean students' strategies might be related to visually-based strategies. Ehrman & Oxford's (1989) study reveals the strong relationship between language learning strategy use and learning style. Differences in learning strategy use by national origin caused Politzer and McGroarty (1985) to ask whether our conceptions of good language learning strategies might be ethnocentrically biased, because the Asian students surpassed Hispanic students in average gains in linguistic competence even though the Hispanic reported using good language behaviors more than the Asians. Reid (1987) found that ESL students' learning modality preferences (visual, auditory, kinesthetic, tactile)-which are probably related to choice of specific strategies for language learning-were strongly influenced by national origin.

Classification of language learning strategies across research studies was a problem. Many researchers used different and conflicting strategy definitions or classification systems (see review Oxford, 1993). This disagreement about definitions created difficulty in comparing results. The current study followed Oxford's (1990) classification system: 3 indirect strategies (metacognitive,

social, and affective) and 3 direct strategies (memory, cognitive, and compensation). This system classifies and describes students' strategies in more detail than other systems, hence it was easier to identify students' strategies for classifying. Oxford's (1990) direct strategies were grouped into cognitive strategy and social and affective strategies into social-affective strategy based on Chamot et al.'s (1989) three systems. Statistical analyses of students data were conducted following three classification systems: metacognitive, cognitive, and social-affective (Appendix 1).

Assessing Learning Strategies: Techniques used for assessing students' L2 strategies include observations, informal or formal interviews, think-aloud procedures, surveys, and language learning diaries or dialogue journals between students and teacher (Oxford, 1993). Each of these methods possess particular strengths and weakness. No single method can effectively assess all learning strategies. Assessment methods as well as the strengths and the weakness of each method follows below. The observational method is a useful tool for investigating actual strategies while students are doing their typical learning behavior. However, many learning strategies can not be observed directly by these external observations, in particular, metacognitive strategies. Diary methods can be used in the classroom setting because they let students report their strategies freely in their own words. This method is hard to summarize the data regardless of its usefulness, as Oxford (1993) commented.

Most of assessment techniques involved some type of learner self-report, either retrospectively (asking the learner to look back at strategies used) or concurrently (asking the learner to comment on strategies while actually doing a language task) (See review: Oxford, 1993). But during self-report, students might forget to mention some strategies which may be operating on a subconscious level, because they are so automatic (Chamot et al., 1989; Hosenfeld, 1973). Vann & Abraham (1990) indicated that O'Malley et al.'s (1985) puzzling findings may be due to data collection method that rely primarily on the use of questionnaire[1]. In addition Asian students

[1] O'Malley et al (1985) reported that subjects used more strategies for activities such as vocabulary learning and pronunciation than for complex involving analysis and inferencing.

were likely to answer what the researcher is expecting because of their cultural characteristics (Reid, 1987). This situation has led us to question learning strategy research because of possible reliability problems in self-reporting. In response to these problems, the think-aloud procedure enables us to find students' in-depth strategies, though some researchers criticize that it is time-consuming (Cohen & Hosenfeld, 1981; Faerch & Kasper, 1987). The advantage of a think-aloud method has been discussed by many researchers (Hosenfeld, 1973; Hosenfeld et al., 1981). This current study will use a variety of methods to assess the learning strategies of sixty Korean students from grades 7, 8, and 9. This study follows both retrospective interview and think-aloud procedure to discover the strategies Korean middle school students are concurrently using retrospectively and in real tasks respectively (Chamot et al., 1989; Vann & Abraham, 1990).

Based on the previous research findings, the researcher will suggest the following hypotheses: (1) metacognitive strategies will increase, while cognitive strategies will decrease with increases in students' grade level; (2) successful language learners will use more and more effective learning strategies than do poorer learners; (3) females use more learning strategies than males; (4) students' strategies will differ from language task to language task; and (5) most Korean students will use noncommunicative strategies such as translation, rote memorization, uncreative forms of repetition because of their instructional background, input-poor environment, and cultural effect.

3. Method

(1) Subjects: 60 students learning English as one of their school subjects in Korean public middle schools participate in this study. The subjects were selected from 3 rural schools and included learners at three levels (7th, 8th, and 9th). The schools were input-poor environments in terms of English language use (Kouraogo, 1993). For this study, five students in each grade were randomly selected from advanced 30 % and low-level 30 % groups each, based on a Korean national standardized test and criterion-based classroom test results. Each subject was sub-categorized into gender, grade level, and L2 language proficiency level.

(2) Instruments: In this study, the retrospective interview method used by Chamot & Kupper (1989) and the think-aloud interview method used by Vann & Abraham (1990) was employed to discover the strategies Korean middle school students report having used recently as well as strategies they report using during a real task. Following a retrospective interview guide slightly adapted from Chamot & Kupper (1989), students were interviewed about the following categories: vocabulary learning, listening, reading comprehension, and writing strategies[2] (Appendix 2). In the think-aloud procedure, students were asked to report their thoughts while actually working on specific language tasks: vocabulary learning, listening comprehension, reading comprehension, and writing tasks. Strategy classification of the data into three major categories was conducted by a researcher and a graduate student with sample data of 5 students. During first classification period inter-rater reliability coefficient was a little low (.70). The first low inter-rater reliability resulted from misunderstanding of strategy definition. And hence high inter-rater reliability coefficient was accomplished (.93) after an extra training session.

(3) Procedure: The data-gathering procedure follows a three session: (a) background information; (b) retrospective interview; and (c) think-aloud method. The background information, interview data, and think-aloud results used by Korean learners were collected by 3 male Korean teachers who were teaching English in these middle schools. During a retrospective interview, each student was asked to report their strategy use in the four language learning areas after their regular classes. It took 20 minutes per person and 3 weeks to complete the interviews in three schools. Students were also asked to solve specific language tasks and report their thoughts simultaneously: vocabulary learning (1st week), listening task (2nd week), reading task (3rd week), and writing task (4th week). The tasks used in class for quizzes or previous regular exams were selected by the teachers. The same language tasks were distributed to every student in 3 schools and each task

---

2 7th and 8th grade students' writing strategies data were omitted in this study, because most students reported that they have seldom written in English both in class and at home. This is reasonable because they started to learn English in the middle school.

took 20 minutes to complete. These think-aloud protocols were tape-recorded and transcribed by the teachers. Students' strategy data were categorized into metacognitive, cognitive, and social-affective strategies and analyzed using statistical instruments by the researcher (see Chamot & Kupper, 1989). Students' strategy data were further sub-categorized into high, middle, and low level of strategies by quality (Appendix 4).

(4) Data Analysis: Hypothesis 1, metacognitive strategies will increase, while cognitive strategies will decrease with increases in students' grade level, was tested by the analysis of variance (two: metacognitive and cognitive, by three: 7th, 8th and 9th) which was followed by a post-hoc test (turkey test). To test hypotheses 2 and 3, successful learners will use more and more effective learning strategies than do poorer learners and females will use more learning strategies than males, t-tests were conducted to compare strategies both between advanced and poor students and between males and females altogether and in each grade level. Because students' strategies were also sub-grouped by quality: from 1 point to 3 point, t-tests were also conducted in the same way for the quality data (hypothesis 2: more effective learning strategies). Both hypothesis 1 and 2 were supported by the qualitative analyses. Hypothesis 4 and 5, students' strategies will differ from language task to language task and most Korean students will use noncommunicative strategies, were discussed by descriptive analyses and frequency data. The data collected from students included a few metacognitive and social-affective strategies which were also restricted to specific groups. And hence statistical analyses were performed to compare cognitive strategies used by students and metacognitive strategies were analyzed in case. The use of metacognitive or social-affective strategies were described in the result section. Analysis of variance and t-tests were set at $P < .05$. Finally, the frequency data in each level were provided in the Appendix 3.

4. Results

Hypothesis 1: Metacognitive strategies will increase, while cognitive strategies will decrease with increases in grade-level.

The metacognitive strategies used by students were as follows: paying attention such as stick to

the main idea or key words; identifying the purpose of the task; seeking practice opportunities. One-way analysis of variance showed that there was no significant difference among the metacognitive strategies of three grade levels ($p > .05$: $p=.08$), even though metacognitive strategy use has numerically increased: 1.5 vs 2.25 vs 3.9. The hypothesis 1 was not validated from the results.

Students' metacognitive strategy use was restricted to specific language tasks such as listening comprehension, reading comprehension, and writing tasks, not a vocabulary task. Most metacognitive strategies were used by advanced students. Most advanced students in each grade level reported one or two metacognitive strategies, while four 7th grade poor students and only two poor students of 8th and 9th grade students each reported them in a listening comprehension task and a reading comprehension task respectively. This result indicated that poor students could not develop their metacognitive strategies as they got older without strategy training. Even advanced students could not develop their metacognitive strategies because they maintained similar number of strategies with increases in grade levels.

In the case of cognitive strategy use, statistical analyses of ANOVA did not reveal any significant difference among each grade level either ($p > .05$: $p=.88$), though numerically cognitive strategy use has increased as their grade level increased: 15.20 vs 18.85 vs 21.70. The above results indicated that the developmental or biological increase in strategy use did not appear to a statisticcally significant level in the Korean middle school students. There were significant differences in quality between advanced and low level students in each grade level, but there was no significant difference among grade levels. In other words, both advanced students and poorer students did not change their strategy use as they got older. This fact suggests that a strategy training may be required for both advanced and poor students.

Hypothesis 2: Successful language learners will use more and more effective strategies than do poorer learners.

A T-test analysis showed that successful students used more effective cognitive strategies than

poorer students did in quality ($p < .05$: $p = .003$), but that there was no significant difference in quantity or frequency: the number of cognitive strategies used ($p > .05$). In addition t-test analysis indicated that successful language learners used more metacognitive strategies than did poorer learners ($p = .002 < .05$). And hence hypothesis 2 was validated in quality of strategy, but not in frequency. The statistical analyses indicated interesting contrasts in each grade level. There was no significant difference in both frequency and quality between advanced students and poor students in 7th grade level ($p > .05$). But the differences increased as their grade levels increased. 8th advanced students used more effective strategies than 8th grade poor students in the vocabulary task ($p < .05$). 9th grade students used more and more effective strategies than poor students did in most tasks except the number of strategies used in listening and reading comprehension tasks. This result indicated that statistical significance between advanced and poor students was mainly due to 9th grade students' strategy use rather than 7th or 8th grade students'. Even though the difference between them did not appear in 7th grade, it has increased as they got older. In addition the important difference between advanced students and poor students might be due to their use of metacognitive strategies, as I discussed in the previous section.

The qualitative analyses of students' protocols indicated that advanced students used strategies more systematically and coherently than poor students did, even though both advanced and poor students (7th or 8th) used a similar number of strategies. The following protocol was one of protocols by 7th grade advanced students:

"When I am memorizing new words, I wrote spelling and pronunciation as a first step. And then I am trying to recall spelling by pronunciation and memorize the meaning of the words. Finally, I self-test the words as follows: write pronunciation on the blank page and then fill out the spelling and meaning." (a 7th grade advanced male student)

Even though advanced students described as many strategies as poor students did, their strategy use followed a systematic steps. In addition advanced students also seemed to be aware of their learning processes This was a personal statement from a 7th grade advanced female student (retrospective interview):

"Even though I repeat to read or write words several times to memorize them, it is easier to recall the words by pronunciation (sounds) rather than repeating mechanically."

The two protocols above showed that advanced students possessed a kind of self-evaluating (Oxford et al., 1989).

The qualitative analyses indicated that every student used a wide variety of clues, linguistic or nonlinguistic, to guess the meaning , in particular, in a listening task and a reading task. This result contradicted previous research findings that good language learners use good guessing strategies while poor learners try to look up unfamiliar words exclusively (Rubin, 1981). Even though both used good guessing strategies, the difference might be a threshold level, minimum knowledge of vocabulary to guess the meaning as follows:

"Even though I focused on the main idea from key words, most of the words are not familiar." (a protocol by a 8th grade poor female in a reading task)

Even though both advanced students and poor students used similar metacognitive strategy such as "paying attention strategy" (Oxford, 1990), the difference in the strategy use was that advanced students focused on main idea or key words, while poor females focused on the familiar words to get the main idea. This different approach might be due to their lack of enough vocabulary knowledge.

Other researchers have reported that the lack of self-regulatory skills have led to the differences in strategy use (Vann & Abraham, 1990). The predicting strategy used by a 9th advanced male was exciting at this point:

(After listening to the tape-recorder)
"Since he came back home after playing soccer for two hours, I expected that he must have been hungry and need something to eat."
(In fact, the following content from the tape recorder matched his expectation)
(A protocol in a listening task)

Both advanced and poor students used good guessing strategies from familiar words, linguistic or nonlinguistic cues (picture or world knowledge). But advanced students combined linguistic and nonlinguistic cues together effectively, while poor students adhered to one of them exclusively

(Chamot & Kupper, 1989).

Hypothesis 3: Females will use more learning strategies than males.

The T-test did not reveal any significant difference between males and females in both frequency and quality. Even though females used a few more cognitive strategies than males (8.83 versus 9.06 in frequency mean: 17.56 versus 19.60 in quality mean), two groups' means were not significantly different ($p = .81 > .05$ in frequency and $p = .40 > .05$ in quality). The use of metacognitive strategies was reversed in order (male: 2.8 versus female: 2.3), but the difference in metacognitive strategy use was not significant ($p > .05$). The third hypothesis was not validated in this study.

This result contrasted with previous research findings, that is, females reported greater strategy use than male students (Oxford & Nyikos, 1989; Politzer, 1983; Green, 1991). Two possible explanation could be suggested: procedural limitation. Because interviewers in this study consisted of male teachers, female students could be influenced by the presence of male teachers. This might be combined with the following interview protocol:

> "I could not use in a real task as many strategies as I did concurrently because of time limit for the task."
> (a personal statement by two 9th grade female students)

This statement informed that we could not identify all strategies at one time students were using, in particular, 9th advanced females. But the reason only female students reported their feelings above might be explained by the presence of male interviewers.

Hypothesis 4: Students' strategies will differ from language task to language task.

Vocabulary Learning: Previous research suggested that vocabulary learning strategy tend to consist of memory strategies and cognitive strategies exclusively (Oxford, 1990). The strategies used by 7th grade students showed that most students reported mechanical memorizing: repeating (memory strategy). When they repeat new words, they frequently write the words several times mechanically rather than read them. This mechanical writing might be related to their visual learning style (Oxford, 1985; Reid, 1987). The interesting strategy used by several students was a

cooperative vocabulary test with peers as memory strategy except advanced female students. This strategy use revealed that students might combine several strategies together, that is, both social-affective and memory strategies in this case. Advanced female students reported diverse strategies such as employing actions (rhythmical reading like singing a song or representing sounds in memory).

Even though many students still used a mechanical repeating strategy in the vocabulary learning, 8th grade students reported higher level of memory strategies such as analyzing words into syllables, combining short words, association strategies than 7th grade students. Analyzing words deductively between sounds and syllables was used by advanced students, while association strategy was used by most students except poor male students. One of the good association strategies used by students shows us how to use their native language knowledge: e.g. many (English) : [mani] (Korean). When he memorize the English word, "many", he associate the word with Korean word with similar pronunciation which also means the same meaning.

9th grade students reported a variety of vocabulary learning strategies such as repeating, formally practicing with sounds and forms, translating, using resources (dictionary), analyzing expression (dividing sounds and spelling); placing new words into a context, representing sounds in memory, reviewing well (self-test), using key words (auditory link between two language), employing action; encouraging yourself (drawing curiosity), and cooperating test with peers. But poor male students frequently used repeating strategy mechanically. The advanced males depended less on mechanical repeating strategy. Though they used this mechanical strategy, they also grouped new words into a certain category. Advanced students seemed to be aware of the ineffectiveness of a mechanical strategy as indicated by the following:

> "Mechanical repeating strategy is not effective in memorizing new words."
> by one advanced male student

Poor females as well as poor males still depended on mechanical repeating strategy. Every poor female student reported this mechanical repeating strategy as one of her strategies. The following

personal statement was exciting:

> "It is easier to memorize those words which appear on T.V. Advertizement"
> by 9th grade two poor females and one advanced female

This statement encouraged us to use an advance organizer or realia to introduce new words in class. Only two advanced females reported repeating strategy, while most of them used a variety of strategies. While doing real vocabulary task, one female student made a statement as follows:

> "It is much easier to memorize the words which are related to each other."

This informed us that L2 teachers needed to relate new vocabulary to previous ones in class. The qualitative analyses indicated that students developed their memory strategies or cognitive strategies with increases in grade level. In addition the results supported that vocabulary learning elicited memory strategies rather than compensation strategies or metacognitive strategies which were useful to a listening task or a reading task (Chamot & Kupper, 1989). Furthermore, exclusive use of "mechanical repeating strategy" supported hypothesis 5.

Listening Comprehension: Most students reported both cognitive and compensation strategies to overcome their limitations during listening (Oxford, 1990, p. 47). Students also reported metacognitive strategies such as paying attention, seeking opportunities to practice, identifying the purpose of the task. Compensation strategies such as guessing strategy were used by most students. But advanced students relied on key words, main idea, or combination of picture cues and key words, while poor students used picture cues or familiar words exclusively.

7th grade students reported the following strategies: metacognitive strategies; cognitive strategies such as using resources (refer to dictionary), predicting, or skip; compensation strategies such as guessing strategies and getting help. Most 7th grade students except poor females reported metacognitive strategies such as paying attention or seeking practice opportunities, while only advanced students (two males and one female) reported metacognitive strategies in case of 8th grade students: paying attention to key words or main idea and identifying the purpose of the task. But 8th grade students reported greater cognitive and compensation strategies: getting the idea

quickly from familiar words, pictures, or context, taking notes, skipping, prediction, translation, and guessing strategies than 7th grade students (Oxford, 1990).

Many 9th grade students reported metacognitive strategies such as centering your learning (paying attention or selective listening) except poor female students. But the frequency of this strategy was much lower than those of cognitive or compensation strategies. Students seemed to use both metacognitive and cognitive strategies complementary (Oxford & Crookall, 1989). For example, students used cognitive strategy such as skimming, skipping, or preview question strategy, but they also used metacognitive strategy such as paying attention or selective listening based on preview question.

Reading Comprehension: 7th grade students reported the following three major strategies in reading comprehension task: guessing (from familiar words, grammar or whole context), using resources (dictionary), and translating (put the glossary under the words). The interesting strategy used by students was that most students constructed their own meaning with familiar words, no matter what they did, such as skipping or rereading the text again during reading.

Most 8th grade students reported metacognitive strategy except poor male students (one advanced male, two poor females, and 2 advanced females). The common metacognitive strategy was "paying attention strategy" (Oxford, 1990). But the difference in the strategy use was that advanced students focused on main idea or key words, while poor females focused on the familiar words. The real difference might be the minimum knowledge of vocabulary to get main idea as follows:

> "Even though I focused on the main idea from key words, most of the words are not familiar." (a statement by a poor female)

The difference between 7th and 8th grade students was that 8th grade students (in particular advanced female students) used a variety of reading strategies, while poor male students' strategy use did not change so much. Only advanced students developed diverse strategies when they get older or learn more.

For 9th grade students, both advanced and poor students reported a similar number of strategies. The quality of the strategies used by students seemed to be different. One of the examples was "skipping" strategy when confronting unfamiliar words. Poor students just skipped unfamiliar words and finally constructed the whole meaning of the text with familiar words, but advanced students skipped unfamiliar words in cases where those words do not inhibit their ongoing comprehension process or were not essential in interpreting the whole text.

Writing task: This language task was restricted to 9th grade students because most 7th and 8th grade students reported that they have never written in English in class or at home. Many 9th grade students reported metacognitive strategies except poor male students (only one male student): planning for a language task, brainstorming the idea in Korean before writing, identifying the purpose of language task, overviewing and linking with already known materials. The statistical analysis indicated that advanced students used more and better strategies than poor students did ($p = .0104 < .05$)[3]. The frequent use of metacognitive strategies might be attributed to the type of task, because it requires the use of planning and self-evaluating (Oxford et al., 1989).

Students also used translation strategy or taking notes as one of the major cognitive strategies. They first wrote in Korean and then they translated Korean into English when writing a personal essay. The translation processes between advanced and poor students were different. Poor students adopted several English expressions from references or textbooks, while advanced students were trying to express their idea or thought rather than adjust or approximate the message. The following statement is from an advanced male student:

> "I think that the most important thing in writing an essay is to express my idea, not to write very complicated structure or difficult words."

This supported the hypothesis 2, that is, advanced students will use more effective strategies than do poor students.

---

[3] The researcher classified every metacognitive strategy into high quality of strategies. (See Appendix)

Hypothesis 5: Most Korean students will use noncommunicative strategies.

The results indicated that most Korean students reported noncommunicative strategies such as rote memorization, uncreative forms of repetition, or translation rather than communicative strategies. In particular, rote memorization and uncreative forms of repetition consisted of more than 50% of vocabulary learning strategies used by students. This strategy use might result from teachers' traditional teaching method, focusing on grammar or receptive skills such as reading or listening, rather than productive skills such as speaking or writing (Chamot et al., 1987). The retrospective interviews with students showed that 7th and 8th grade students have never written in English in class or at home. Students have seldom had opportunities to practice even in class. The interview with school teachers showed that they have seldom assigned group conversation or free talking time to the class or taught writing skills to 7th or 8th grade students. Even though they taught those skills to 9th or higher grade level of students, they prepared the lesson for the entrance exams to high schools or college.

5. Discussion and Implications

Based on previous research results, the researcher hypothesized several assumptions. Even though the statistical analyses did not support the first hypothesis, that is, metacognitive strategies will increase, while cognitive strategies will decrease with increases in grade levels. Though not statistically significant, metacognitive strategy use increased a little over time: 1.5 vs 2.25 vs 3.9. Students' cognitive strategies also increased over time: 15.20 vs 18.85 vs 21.70. Because previous findings were based on the strategy use of adult ESL students or high school students (O'Malley et al., 1986; Vann & Abraham, 1990; Chamot & Kupper, 1989), the result in the current study might not match previous research. Middle school students' cognitive strategies might decrease in the 10th grade or high school levels, while their metacognitive strategies might increase over time. But the current research findings suggest that all levels of students used more cognitive strategies than metacognitive strategies (Bialskey, 1983; Rubin, 1981, 1983). The results indicated that students' metacognitive strategy use was related to types of tasks and their

language proficiency. Poor students could not develop their metacognitive strategies as they got older without strategy training. Even advanced students could not develop their metacognitive strategies as indicated by the fact they maintained a similar number of strategies with increases in grade levels. Most of metacognitive strategies used by students were planning strategies rather than evaluating (Chamot & Kupper, 1989). But advanced students seemed to evaluate their learning processes. Many advanced students stated the ineffectiveness of mechanical traditional strategies during a retrospective interview period even though they did not report them as their strategies while doing real tasks. They might not consider this evaluating process as a specific strategy to solve language tasks.

The second hypothesis, advanced students use more effective strategies than do poor students, was partially validated in particular, 9th grade students. The statistical difference between advanced students and poorer students was significant in the whole group, which was mainly due to the 9th grade students. Statistical analyses did not reveal any distinctions between advanced and poor students in case of 7th and 8th grade students except 8th grade students' vocabulary task ($P < .05$ in quality analysis). Poor 7th and 8th grade students used as many and good strategies as advanced students did. The traditional criteria supposed by Rubin (1975; 1981) and Naiman et al. (1975) might be called into question. Most students were actively involved in the learning processes and used good guessing strategies during listening and reading comprehension tasks. However, the difference between them was how consistently or systematically to combine those strategies efficiently (Chamot & Kupper, 1989; Vann & Abraham, 1990). Even though both advanced and poor students reported a similar number of high or low strategies, advanced students combined their strategies (for example, metacognitive with cognitive strategies or memory with social strategies) consistently and efficiently and they also evaluated their learning strategies.

The results of 9th grade students' strategy use supported that advanced students used more effective strategies than did poor students ($p < .05$ in all tasks) (Bialystok, 1981; Politzer, 1983).

But advanced students did not use more strategies than poor students did. This result implies that we need to further investigate metacognitive strategies used by students. In addition we should investigate the strategies in combination with other strategies not separately (Green & Oxford, 1995). Advanced students combined metacognitive strategy with cognitive strategy during a listening comprehension task (Oxford & Crookall, 1989). Furthermore, the criteria of good language learners' strategies should be based not on "how many" or "what kinds of", but "how to combine" through metacognitive processes. In response to these results, we also question the quality of strategy used by students. Even low level of strategy could be good combined with other good strategies (Green & Oxford, 1995).

The third hypothesis was not validated in this study. We did not find any distinction between males and females across levels. However, females seemed to report a variety of strategies compared with males, that is males' strategies are homogeneous, while females' strategies are heterogeneous within each grade level (Ehrman & Oxford, 1989; see reviews in Oxford, Ehrman, & Nyikos, 1988; Oxford, 1993). That is, females tended to use a greater variety of strategies than males in general (Oxford, 1993), but the differences are likely to occur in specific areas (Politzer, 1983; Green & Oxford, 1995; Nyikos, 1990; Oxford & Nyikos, 1989; Oxford, Park-Oh, Ito, & Samurall, 1993a, 1993b). For example, Politzer (1983) reported that females showed a greater propensity than males to engage in out-of class social interactions, that is "social strategies". However, the distinction between males and females in the current study might not occur in input-poor environments where learners have few opportunities to practice in out-of class (Kouraogo, 1987). In addition this conflicting finding might be related to the methodological problem. As one poor 7th grade female and one advanced 9th grade female stated, they could not report all strategies which they were using concurrently because of time limit while doing a real task. They might also be more influenced by the presence of male interviewers[4].

---

[4] Korean teachers are composed of male teachers in this study. Because they interviewed students and conducted the study, female students might be more influenced by male teachers.

Specific strategy use also depended on the type of tasks (Chamot & Kupper, 1989; O'Malley & Chamot, 1990). Students consistently used memory strategies during vocabulary learning (Oxford, 1990), while they reported compensation strategies during listening or reading comprehension tasks (Chamot & Kupper, 1989). Metacognitive strategy use was restricted to listening and writing tasks (Oxford et al., 1989). Many 9th grade students reported a metacognitive strategy such as planning while doing writing tasks. This writing task basically required the use of planning strategy (Oxford et al., 1989).

The fifth hypothesis was also partially validated. Most students used noncommunicative strategies such as repeating, translation, or rote memorization (Chamot & Kupper, 1989). When their grade level was higher, advanced students less depended on the mechanical process. But poor students still exclusively stuck to traditional cognitive strategies across levels. The distinction between advanced and poor students appeared significantly in the 9th grade level. The use of mechanical repeating also restricted to "write new words several times", rather than practicing aloud or listening to tapes over time. This might be related to Korean students' learning style (Reid, 1987)[5].

Overall, every student was actively involved in the language learning processes. They used linguistic and nonlinguistic cues to interpret the text. The problems which caused poor students in trouble seemed to related to: (1) threshold level, the minimum level of vocabulary or basic level of knowledge, and (2) metacognitive strategy such as planning or evaluating. As several poor students mentioned, the lack of minimum knowledge of vocabulary interfered their learning process. This fact told us the importance of vocabulary instruction. Many students stated that when new words were related to each other or they appeared on T.V. Advertizement, students could memorize them better with ease. When we introduce new vocabulary, we need to relate them to previous ones through advance organizer or semantic mapping between similar categories.

---

5 Reid found that Korean students were the most visual in their learning style preference among 9 national groups.

As far as concerned with metacognitive strategies, we should help students to evaluate their language learning processes in class. Metacognitive strategy training for ESL listening and reading instruction has been discussed in recent literature (Oxford, 1993a; Carrell et al., 1989; Shih, 1992). L2 listening comprehension as well as L2 reading comprehension involves both bottom-up and top-down processing (Ur, 1984). The crucial strategy is how to monitor their comprehension, that is metacognitive strategies, through interaction of those processes. Instructors should provide students with "cognitive training with awareness", helping students evaluate their strategies, that is what strategies they use, why, when, where, and how they function (Armbruster & Brown, 1984).

The findings also indicate that both advanced and poorer students did not change their strategy use as they got older (see results of hypothesis 1). This suggests that effective language learning strategies should be taught for application in or outside the classroom (Chamot & Kupper, 1989, 1990; Nyikos, 1991). However, strategy instruction should not be taught separately, but should be modeled simultaneously with what is being taught (Chamot & Kupper, 1989; O'Malley & Chamot, 1990). Teachers can give students opportunities to practice with a range of contexts where these strategies are best applied through simulationss, games, and other active exercises (Oxford, 1990). "A teacher guide" to foster learning strategy use was suggested by Nyikos (1991): (1) Find out which strategies your students already employ in other subject areas; (2) Find out what strategies your students have employed in previous foreign language learning; (3) Modeling; (4) Provide a rationale using each strategy presented; (5) Practice; (6) Help students develop their own strategies and students monitor the effectiveness of their present strategies; and (7) Sharing sessions: Get everyone involved in sharing their learning discoveries and self-generated learning strategies as a regular part of class. Teachers can also encourage these good strategy use according to learning styles or preferences (Reid, 1987; Ehrman & Oxford, 1989).

Finally, methodological concerns should be mentioned. Most students reported similar strategies in both the retrospective interview period and the introspective think-aloud procedure in

real tasks. They reported a lot of strategies through think-aloud methods which might not have been identified through a single survey method (Cohen & Hosenfeld, 1981; Hosenfeld, 1976). But we might not identify all students' strategies which might be used usually at home or silently at one time. If both retrospective and introspective methods are used with dialogue journal or language learning journals in class together, classroom teachers could get instructional advantage from students' report.

Another methodological limitation of this study was that teachers who conducting this study were not familiar with the think-aloud procedure and hence it might have caused us to miss much more useful data from students. In addition when we interview or conduct think-aloud procedure, we should consider students' personality. In this study females might be more influenced by male interviewers. Furthermore, East Asian students were not familiar with a think-aloud method. Their cultural heritage respects "silence" rather than "talk a lot", compared with the western culture[6]. Before conducting a think-aloud method, students could be accustomed to it through a training session.

---

6 The researcher tested how two Korean children responded to the think-aloud method: the first one staying in Korean and the other staying in U.S.A for 3 years. Even the children with the same cultural origin responded differently. While the first felt embarrassed, the latter felt comfortable with a think-aloud method. This indicated that cultural or school environments influenced their personality.

< References>

Abraham, R. G., & Vann, R. J. (1987). Strategies of two language learners: A case study. In E. A. W. J. Rubin. (Ed.), *Learning strategies in language learning*, (pp. 85-102). Englew Cliffs, NJ: Prentice Hall.

Bacon, S. M., & Finnemann, M. D. (1990). "A study of the attitudes, motives, and strategies of university foreign language students and their disposition to authentic oral and written input." *Modern Language Journal*, 74(iv), 459-473.

Bialystok, E. (1981). "The role of conscious strategies in second language proficiency." *Modern Language Journa.* 65, 24-35.

Bialystok, E., & Frohlich, M. (1978). "Variables of classroom achievement in second language learning." *Modern Language Journal*, 62, 327-335.

Carrell, P. L., Pharis, B. G., & Liberto, J. C. (1989). "Metacognitive strategy training for ESL reading." *TESOL Quarterly*, 23, 647-678.

Chamot, A. U. (1993). "Students response to learning strategy instruction in the foreign language classroom." *Foreign Language Annals*, 26-3, 308-321.

Chamot, A. U., & Lisa, Kupper. (1989). "Learning strategies in foreign language instruction." *Foreign Language Journal*, 22(1), 13-24.

Cohen, Andrew., & Aphek, Edna. (1981). "Easifying second language learning." *Studies in Second Language Acquisition*, 3, 221-237.

Cohen, Andrew., & Hosenfeld, Carol. (1981). "Some uses of mentalistic data in second language research." *Language Learning*, 31(2), 285-313.

Donato, R., & Mccormick, D. (1994). "A sociocultural perspective on language learning strategies: The role of mediation." *Modern Language Journal*, 78(iv), 453-464.

Ehrman, M., & Oxford, R. (1989). "Effects of sex differences, career choice, and psychological type on adult language learning strategies." *Modern Language Journal*, 73, 1-13.

Ehrman, M., & Oxford, R. (1990). Adult language learning styles and strategies in an intensive training setting. Modern Langguage Journal, 74-3, 311-326.

Ehrman, M. E., & Oxford, R. L. (1995). "Cognition plus: Correlates of language learning success." *Modern Language Journal*, 79(i), 67-89.

Ericsson, K. A., & Simon, H. A. (1980). "Verbal reports as data." *Psychological Review*, 87-3, 215-251.

Hosenfeld, C. (1976). Learning about learning: Discovering our students' strategies. Foreign Language Annals, 9, 117-129.

Hosenfeld, C. (1979). A learning-teaching view of second language instruction. Foreign Language Annals, 12, 51-54.

Hosenfeld, C., Arnold, V., Kirchofer, J., Laciura., & Wilson, L. (1981). "Second language reading: A curricular sequence for teaching reading strategies." *Foreign Language Annals*, 14(5), 415-422.

Huang, X. H., & Vann Naerssen, M. (1985). "Learning strategies for oral communication." *Applied Linguistics*, 6, 287-307.

Kouraogo, P. (1993). "Language learning strategies in input-poor environments." *System*, 21(2), 165-173.

Kouraogo, P. (1987). "Curriculum renewal and INSET in difficult circumstances." *ELT Journal*, 41, 171-178.

Krashen (1978). Second language and foreign language teaching.

Krashen (1981). Second language acquisition and second language learning.

Krashen, S. C. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon.

Krashen (1985). The input hypothesis.

MacIntyre, D. P. (1994). Toward a social psychological model of strategy use. Foreign Language Annals, 27(2), 185-195.

McLaughlin, B., Rossman, T., & McLeod, B. (1983). "Second language learning: An information-processing perspective." *Language Learning*, 33, 135-158.

Naiman, F., & Todesco, A. (1975). "The good second language learner." *TESL Talk*, 6,

58-75.

Naiman, N., Frohlich, M., Stern, H. H., & Todesco, A. (1978). The good language learner. (Vol. No. 7). Toronto, Ontario: Ontario Institute for Studies in Education.

Nyikos, M. (1987). The effects of color and imagery as mnemonic strategies on learning and retention of lexical items in German. Diss. Purdue Univ.

Nyikos, M. (1990). "Sex-related differences in adult language learning: Socialization and memory factors." *Modern Language Journal, 74,* 274-287.

Nyikos, M. (1991). Prioritizing student learning: A guide for teachers Focus on the foreign language learner. In L. Strasheim (Ed.), *Priorities and strategies*, . Lincolnwood, IL: National Textbook, 25039.

Nyikos, M., & Oxford, R. (1993). "A factor analytic study of language-learning strategy use: Interpretations from information-processing theory and social psychology." *Modern Language Journal*, 77(i), 11-22.

O'Malley, J. M., Chamot, A. U., Stewner-Manzares, G., Kupper, L., & Russo, R. (1985a). "Learning strategies used by beginning and intermediate ESL students." *Language Learning*, 35, No.1, 21-46.

O'Malley, J. M., Chamot, A. U., Stewner-Manzares, G., Russo, R., & Kupper, L. (1985b). "Learning strategy application with students of English as a second language." *TESOL Quarterly*, 19, 285-296.

O'Malley, J. M., & Oxford, R. L. (1990). *Learning strategies in language acquisition.* Cambridge: Cambridge University Press.

Oxford, R. (1989a). "The best and the worst": An exercise to tap perceptions of language-learning experiences and strategies. *Foreign Language Annals,* 22(5), 447-454.

Oxford, R. (1989b). "Use of language learning strategies: A synthesis of studies with implications for strategy training." *System,* 17(2), 235-247.

Oxford, R. (1993a). "Instructional implications of gender differences in second/foreign language (L2) learning styles and strategies." *Applied Language Learning*, 4(1-2), 65-94.

Oxford, R. L. (1993b). "Research on second language learning strategies." *Annual Review of Applied Linguistics*, 13(v), 175-187.

Oxford, R., & Cohen, A. D. (1992). "Language learning strategies: Crucial issues of concept and classification." *Applied Language Learning*, 3, 1-35.

Oxford, R., & Crookall, D. (1989). "Research on language learning strategies: Methods, findings, and instructional issues." *Modern Language Journal*, 73, 404-419.

Oxford, R. L., & Ehrman, M. (1993). "Second language research on individual differences." *Annual Review of Applied Linguistics*, 13(v), 188-205.

Oxford, R., & Ehrman, M. (1995). "Adults language learning strategies in an intensive foreign language program in the United States." System, 23, 359-386.

Oxford, R. L., Hollaway, M. E., & Horton-Murillo, D. (1992). "Language learning styles: Research and practical considerations for teaching in the multicultural tertiary ESL/EFL classroom." *System*, 20(4), 439-456.

Oxford, R. L., Lavine, R. Z., & Crookall, D. (1989). "Language learning strategies, the communicative approach, and their classroom implication." *Foreign Language Journal*, 22(1), 29-39.

Oxford, R., & Nyikos, M. (1989). "Variables affecting choice of language learning strategies by university students." *Modern Language Journal*, 73, 291-300.

Oxford, R., Nyikos, M., & Ehrman, M. (1988). "Vive la Difference? Relations on sex differences in use of language learning strategies." *Foreign Language Annals*, 21, 321-329.

Politzer, R. L. (1983). "An exploratory study of self-reported language learning behaviors and their relation to achievement." *Studies in Second Language Acquisition*, 6, 54-68.

Politzer, R. L., & McGroarty, M. (1985). "An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence." *TESOL Quarterly*, 19(1), 103-123.

Ramirez, A. G. (1986). "Language learning strategies used by adolescents studying French in New York schools." *Foreign Language Annals*, 19, 131-141.

Reid, J. M. (1987). "The learning style preferences of ESL students." *TESOL Quarterly*, 21(1), 87-111.

Reiss, Mary-Ann. (1985). "The good language learner: Another look." *Canadian Modern Language Review*, 41(3), 511-523.

Rost, M., & Ross, S. (1991). "Learner use of strategies in interaction: Typology and teachability." *Language Learning*, 41(2), 235-273.

Rubin, J. (1975). "What the "Good Language Learner" can teach us." *TESOL Quarterly*, 9, No 1(March, 1975), 41-51.

Rubin, J. (1981). "The study of cognitive processes in second language learning." *Applied Linguistics*, 2, 117-131.

Rubin, J. (1987). Learner strategies: Theoretical assumptions, research, history, and typology. In E. A. W. J. Rubin. (Ed.), *Learning strategies in language learning*, (pp. 15-30). Englew Cliffs, NJ: Prentice Hall.

Shih, M. (1992). "Beyond Comprehension Exercises in the ESL Academic Reading Class." *TESOL Quarterly*, 26, 289-318.

Stein, A. H., & Bailey, M. M. (1973). The socialization of achievement motivation in females. Psychological Bulletin, 80, 345-366.

Stern, H. H. (1975). "What can we learn from the good language learner?" *Canadian Modern Language Review*, 31, 4., 304-318.

Tran, Thanh. V. (1988). Sex differences in English language acculturation and learning strategies among Vietnamese adults aged 40 and over in the United States. Sex Roles, 19, 747-758.

Ur, P. (1984). *Teaching listening comprehension*. Cambridge: Cambridge University Press.

Vann, R. J., & Abraham, R. G. (1990). "Strategies of unsuccessful language learners." *TESOL Quarterly*, 24(2), 177-198.

Wenden, A. (1986a). "Helping language learners think about learning." *ELT Journal*,

40(1), 301-312.

Wenden, A. (1986b). "What do L2 learners know about their language learning?" *Applied Linguistics*, 7, 186-201.

Wenden, A. (1987a). Conceptual background and utility. In E. A. W. J. Rubin. (Ed.), *Learning strategies in language learning*, (pp. 3-14). Englew Cliffs, NJ: Prentice Hall.

Wenden, A. (1987b). How to be a successful language learner: Insights and prescriptions from L2 learners. In A. Wenden & J. Rubin. (Eds.), Learning strategies in language learning, (pp. 103-118). Englew Cliffs, NJ: Prentice Hall.

Wenden, A. (1987c). "Metacognition: An expanded view on the cognitive abilities of L2 learners." *Language Learning*, 37, 573-597.

White, Peter. (1980). "Theoretical note: Limitations on verbal reports of internal events: A refutation of Nisbett and Wilson and of Ben." *Psychological Review*, 87-1, 105-112.

Appendix 1

<Strategy definitions and Classification System>

1. Metacognitive Strategies: are self-regulatory strategies in which learners are aware of their own thinking and learning, and plan, monitor, and evaluate their own learning endeavors. These strategy involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned: Planning, Directed Attention, Selective Attention, Self-Management, Self-monitoring, Problem Identification, Self-evaluation.

2. Cognitive Strategies: in which learners work with and manipulate the task materials themselves, moving towards task completion. These strategies involve interacting with the material to be learned, manipulating mentally or physically, or applying a specific technique to a learning task: Repetition, Resourcing, Grouping, Notetaking, Deduction/Induction, Substitution, Elaboration, Summarization, Translation, Transfer, Inferencing.

3. Social and Affective Strategies: in which students interact with the teacher or other students to solve a problem, or exercise some kind of affective control over their own learning behaviors. These strategies involve interacting with another person to assist learning, or examples about the material; asking for clarification or verification about the task; posing questions to the self: Questioning, Cooperation, Self-talk, Self-reinforcement. (Chamot et al, 1989. p14)

Appendix 2

< English Interview Guide >

1. Vocabulary Learning

You have to learn the meanings of 15 new vocabulary words.

Do you have any special tricks to help you learn and remember the new words and their meanings?

2. Listening to the teacher or a tape-recorder speak English

Your teacher speaks to you in English, explaining grammar rules, making conversation, giving you directions and assignments. There are several words you do not know in what your teacher or a tape-recorder says.

You have to guess at the meaning of these words.

How do you figure out the meanings of the words?

Do you have special tricks or ways that help you understand what the teacher or a tape-recorder says in English?

What's your general approach to listening to English?

What do you do if you don't understand the English you hear?

3. Reading Comprehension

You have to read a short story or perhaps a newspaper article that contains some new words. Then you have to answer some questions on the reading passage.

As you are reading, what do you do that helps you to understand the meaning of the

reading passage? Describe your reading approach.

As you are reading, what do you do when you come to a new word?

What do you do that helps you answer the comprehension questions?

Do you ever read these before you read the passage? If so, why?

4. Written Composition in English

Your teacher gives you the assignment of writing a few paragraphs in English, perhaps on a personal topic or a picture you are shown.

Do you do anything before you start to write? What? How does this help you?

As you are writing, what helps you to write better? Describe your general approach to writing in English.

Do you do anything after you have written? What?

Appendix 3

7th students' learning strategies (quantity/quality)

Vocab	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta								
Cog	5/5	5/5	6/7	5/6	5/5	5/5	8/11	7/8
Mem	1/3	1/3	2/6	3/9	1/3	4/12	3/9	3/9
Soc-Aff					1/3	2/6		

Listen	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta	2/6	2/6	1/3	2/6			3/9	2/6
Cog	1/2	1/3	4/8	0/0	5/12	1/3	1/3	2/6
Comp	4/4	5/5	4/11	4/4	6/10	4/6	4/4	2/2
Soc-Aff								

Readin	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta				1/3	2/6			
Cog	2/2	5/10	6/10	4/7	4/10	5/12	5/15	3/9
Comp	3/3	4/7	2/5	3/7	2/6	3/6	2/4	2/2
SocAff								

8th grade students' learning strategies (quantity/quality)

Vocab	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta			1/3					
Cog	7/10	4/4	6/10	6/10	3/3	4/7	4/7	7/11
Mem	1/3	1/3	4/12	2/6	2/6	3/9	7/21	
SocAff								

Listen	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta			1/3	2/6				1/3
Cog	7/19	3/9	6/18	2/6	3/8	2/6	5/17	5/16
Comp	3/5		2/4	2/2	4/10	3/10	4/8	1/1
SocAff								

Readin	LowM	LowM	HighM	HighM	LowF	LowF	HighF	HighF
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta				1/3		2/6		2/6
Cog	6/13	3/9	5/13	2/6	4/11	2/6	9/20	3/9
Comp	3/5	2/2	3/3	2/4	1/2	3/5	4/9	2/4
Soc-Aff								

9Th students' strategies (quantity/quality)

Vocab	Low(M)		High (M)		Poor(F)		High(F)	
.	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta							1/3	
Cog	5/7	7/6	8/10	5/7	5/7	6/6	12/24	2/2
Mem	2/6	3/9	4/12	5/12	3/9	3/9	3/9	8/24
Soc-Aff	1/3	1/3		1/3				

Listen	Poor (M)		High(M)		Poor(F)		High(F)	
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta		2/6	5/15	2/6			2/6	2/6
Cog	2/6	3/9	6/18	4/12	4/8	2/6	3/9	3/9
Com	4/10	3/6	3/6	2/6	5/6	2/2	4/11	3/6
Soc-Aff								

Readin	Poor(M)		High(M)		Poor(F)		High(F)	
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta			4/12	2/6			2/6	2/6
Cog	1/3	4/5	4/12	10/30	2/4	2/4	3/9	4/10
Com	5/6	5/5	3/8	5/13	5/6	6/6	5/11	5/13
Soc-Aff								

Writin	Poor(M)		High(M)		Poor(F)		High(F)	
	Retro	Intro	Retro	Intro	Retro	Intro	Retro	Intro
Meta	1/3		5/15	5/15	3/9	2/6	2/6	3/9
Cog	4/10	0/0	9/24	6/16	5/11	4/8	3/6	6/16
Com	2/4	4/4	1/1	3/3	0/0	2/2	1/1	1/1
Soc-Aff		2/6						

Appendix 4

<Classification by the qualities of learning strategies>

(1) Vocabulary Learning

A. High quality (3 point)
Meta cog: centering your learning (pay attention to new vocab on T.V. or advertizement), seeking practice opportunities.
Cog: formally practicing with sounds and writing systems, analyzing expressions (deviding into prefixes or suffixes), analyzing contrastively or (associating/elaborating) (friend : friendship = corresponding Korean words), recognizing or using formulas and patterns, taking notes, practicing naturalistically, recombining, analyzing contrastively,
Mem: creating mental linkage, representing sounds in memory, reviewing well, using keywords, employing actions, placing new words into a context, using imagery, grouping,
Soc-Affec: encouraging yourself, cooperating with peers,

B. Mid-quality (2 point)
Cog: using resources,

C. Low-quality (1 point)
Cog: repeating, translating, analyzing expressions (dividing into sounds and spelling),

(2) Listening Strategies

A. High quality (3 point)
Meta: centering your learning (paying attention, selective listening to key idea), identifying the purpose of language tasks, seeking practice opportunities,
Cog: getting the idea quickly (preview question, skim (difficult words to identify the main idea), take notes, predicting, transferring, skipping,
Compensation: guessing intelligently (from the main idea or whole story, by relating previous knowledge to linguistic cues, prediction),

B. Mid-quality (2 point)
Compen: guessing (from previous words or following words, from previous knowledge, or pictures), using resources,

C. Low-quality (1 point)
Compen: guessing (from the familiar words), asking for help,
Cog: pick up similar sounds (test strategy), using resources,

(3) Reading Strategies

A. High quality (3 point)
Meta: paying attention, selective reading,
Cog: getting the idea quickly (preview question, skip (difficult words) to identify key words, scan to find details), rereading the text, highlighting,
Compen: guessing intelligently (from the main idea or key words or by combining key words, and combining linguistic and nonlinguistic cues),
B. Mid-quality (2 point)
Cog: repeating (read over and over), using resources,
Compen: guessing (from surrounding linguistic cues),
C. Low (1 point)
Cog: getting the idea (scan to find difficult words or familiar words), using resources, translating, reading (sound out),
Compen: guessing (from the familiar words, or by sounding them out), ask for help,

(4) Writing Strategies

A. High (3 point)
Meta: planning for a language task, overviewing and linking with already known material, identifying the purpose of a language task,
Cog: translating before writing, taking notes,
Soc-Affec: cooperating with peers,
B. Mid (2 point)
Cog: using resources, analyzing contratively,
Compen: switching to mother tongue,
C. Low (1 point)
Compen: adjusting or approximating the message,